REMARKS

This paper is supplemental to the Response filed on January 9, 2006.

Claims 1-16 and 23-26 were previously pending in the application; claims 1-8, 23, and 25 were under examination. Upon entry of this amendment into the file, claims 27-29 are newly added, and fall within the elected group. Accordingly, claims 1-8, 23, 25, and 27-29 are now under examination. Withdrawn claims 9-16, 24, and 26 are subject to a request for rejoinder pursuant to MPEP § 821.04.

Reconsideration and allowance of the application is respectfully requested, in view of the amendments and remarks made on January 9, 2006, and herein.

New claims

Claims 27, 28, and 29 are added to further illustrate why claim 23 is patentable under 35 USC § 112 ¶ 1. They are supported in the specification as filed *inter alia* on page 12 (5th full paragraph); and on page 40 (3rd full paragraph) through to the end of page 41.

Rejection of claim 23

Claim 23 stands rejected under the written description requirement of 35 USC § 112 ¶ 1. The Office Action refers to MPEP § 2173.05(i) as requiring that "any negative limitation or exclusionary proviso must have basis in the disclosure".

The Examiner is respectfully referred to the sentence immediately following quoted excerpt in MPEP § 2173.05(i):

If alternative elements are *positively* recited in the specification, then they may be explicitly excluded in the claims: See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 194 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining.").

٠.

PATENT USSN 10/053,758 Docket 002980US; 018/183c

Applicants respectfully submit that the claim does have basis in the disclosure as filed, since both SEQ. ID NO:225 and SEQ. ID NO:67 (a portion of SEQ. ID NO:225) are both provided, and their use in producing antibodies is explained. In accordance with both MPEP § 2173.05(i) and In re Johnson, this application provides a full written description for an antibody that specifically binds SEQ. ID NO:225 but not SEQ. ID NO:67.

Negative proviso language is used often in the chemical arts. For example, an application that discloses a structure A-X (where X is any of a genus of substructures), and that discloses A-B as a particular species, can later claim a compound comprising the structure A-X with the proviso that X is not B.

Consider U.S. Patent 4,108,837, the patent at issue in the *In re Johnson* case. The application disclosed and claimed polyarylene polyethers. Claim 1 of the issued patent is as follows (italics added):

1. A substantially linear thermoplastic polyarylene polyether composed of recurring units having the general formula:

where E is the residuum of a dihydric phenol and E' is the residuum of a benzenoid compound having an inert electron withdrawing group in one or more of the positions ortho and para to the valence bonds having a sigma value above about +0.7, and where both of said residuum are valently bonded to the ether oxygens through aromatic carbon atoms with the provisos that E and E' may not both include a divalent sulfone group and may not both include a divalent carbonyl group linking two aromatic nuclei.

The question before the court was whether the application could claim the right of priority to an earlier application that positively recited the generic structure in claim 1, along with a subgenus wherein E and E' could be a divalent sulfone group or a divalent carbonyl group linking two aromatic nuclei.

The court held that the negative limitation in claim 1 was fully supported under the written description requirements of 35 USC § 112 ¶ 1 by a positive recitation in the priority application of the subspecies.

It is for the inventor to decide what bounds of protection he will seek. To deny appellants the benefit of their grandparent [1963] application in this case would, as this court said in Saunders [In re Saunders, 170 USPQ 213,220 (CCPA 1971)]: "... let form triumph over substance, substantially eliminating the right of an application to retreat to an otherwise patentable species ...".

The notion that one who fully disclose, and teaches those skilled in the art how to make and use, a genus and numerous species there within, has somehow failed to disclose, and teach those skilled in the art how to make and use, that genus minus two of those species, and has thus failed to satisfy the requirements of § 112, first paragraph, appears to result from a hypertechnical application of legalistic prose relating to that provision of the statute. . . .

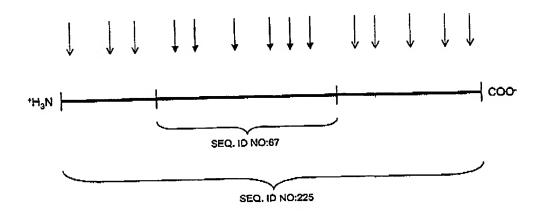
Here, as we hold on the facts of this case, the "written description" in the 1963 specification supported the claims in the absence of the limitation, and that specification, having described the whole, necessarily described the part remaining. . . . [A]pellants are, therefore, entitled to the benefit of their 1963 filing date under 35 USC § 120.

- In re Johnson, 558 F.2d 1008, 1017-1019 (CCPA 1977), italics added.

In applying this principle to claim 23, it is helpful to consider that the claim covers a monoclonal antibody, fragments, and equivalents (either alone, or as part of a mixture). The situation may be illustrated by the following diagram:

₹

PATENT USSN 10/053,758 Docket 002980US; 018/183c



The specification clearly discloses antibodies to SEQ. ID NO:67, and antibodies to SEQ. ID NO:225. In the diagram shown above, monoclonal antibodies to SEQ. ID NO:67 are represented by solid arrows. Monoclonal antibodies to SEQ. ID NO:225 are represented by both the solid arrows and the open arrows. Thus, monoclonal antibodies to SEQ. ID NO:225 but not SEQ. ID NO:67 are represented by the open arrows alone. They are fully described in the specification, according to In re Johnson, as the part remaining.

As a further illustration, consider new claims 27, 28, and 29. These are product-by-process claims that demonstrate the same principle. Claim 27 covers antibodies made against SEQ. ID NO:225, which are clearly described in the specification. Claim 28 covers antibodies made against SEQ. ID NO:67, which are also clearly described in the specification. Thus, claim 29 (antibodies obtainable using SEQ. ID NO:225 as an immunogen or screening agent that are not obtainable using SEQ. ID NO:67) is also described in the application. The principle that applies to claim 29 also applies to claim 23.

Withdrawal of this rejection is respectfully requested.

Rejection of claim 25

Claim 25 stands rejected on the assertion that the specification supports antibodies specific for a polypeptide comprising SEQ. ID NO:67, but not consisting of SEQ. ID NO:67.

For reasons explained in the previous response, it is applicants' position that the claim as previously worded is fully described by the specification as filed. Nevertheless, the claim has been amended herein in accordance with the Examiner's recommendation. Withdrawal of this rejection is respectfully requested.

Withdrawal of this rejection is respectfully requested.

Request for Rejoinder:

Claims 9-16, 24, and 26 are method claims that incorporate limitations of the product claims under examination. Applicants again renew the request that these claims be rejoined into the group under examination, upon determination that the product claims are patentable, in accordance with MPEP § 821.04.

Applicants have amended claims 9 and 13 to reflect that it is SEQ. ID NO:225 that is being detected, in accordance with the Examiner's recommendation.

Related applications

As the Examiner is aware, there are other issued and pending application relating to sequences for telomerase reverse transcriptase.

Since the last Amendment made in this application, USSN 09/438,486 has issued as U.S. Patent 6,927,285; USSN 10/054,295 has issued as U.S. Patent 6,921,664; and both USSN 09/843,676 and 10/054,611 have been allowed.

Request for Interview

Applicants respectfully request that all outstanding rejections be reconsidered and withdrawn. The application is believed to be in condition for allowance, and a prompt Notice of Allowance is requested.

In the event that the Examiner determines that there are other matters to be addressed, applicants hereby request an interview by telephone.

Fees Due

Accompanying this Amendment is authorization to charge the deposit account for the added claims.

Should the Patent Office determine that an extension of time or any other relief is required for further consideration of this application, applicants hereby petition for such relief, and authorize the Commissioner to charge the cost of such petitions and other fees due in connection with the filing of these papers to Deposit Account No. 07-1139, referencing the docket number indicated above.

Respectfully submitted,

J. Michael Schiff Registration No. 40,253

GERON CORPORATION 230 Constitution Drive Menlo Park, CA 94025 Telephone: (650) 473-7715

Fax: (650) 473-8654

January 26, 2006

geron

GERON CORPORATION 230 Constitution Drive Menlo Park, CA 94025 Phone: (650) 473-7700

Fax: (650) 473-8654, (650) 566-7181

facsimile Transmittal Sheet

LAST PAGE

USSN 10/013,205

Attorney Docket 015389-002980US; 018/183C